

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5**

**U.S. EPA COMMENTS ON DRAFT TIME CRITICAL REMOVAL ACTION WORK PLAN  
DEAD CREEK SEDIMENT AND SOIL REMOVAL ACTION  
SAUGET AREA 1 SITE**

**General Comment:** The work plan needs to include a plan for the inclusion of a command post for the removal action. Solutia has previously mentioned the intention to move the current Area 1 command post from its location at Site R (Area 2) to an area on Judith Lane near the proposed containment cell location. U.S. EPA would like to make this location known to the public in advance of the removal action and encourage the public to visit the command post should they have questions or concerns about the removal action. A point of contact from Solutia should also be named so that the public knows who to contact with questions. A sign should also be posted outside the command post that provides contact telephone numbers of Solutia and U.S. EPA representatives.

**Specific Comments:**

**1. Section 3, Page 3-12, Subsection 3.5:** For the sake of accuracy, it should be noted in the text that not only were PCBs "...used by industries throughout the Sauget and Cahokia area." but, they were produced at Monsanto's Krummrich Plant in Sauget.

**2. Section 4, Page 4-2, Subsection 4.2:** The second to last paragraph in this subsection reads: "Removal of sediment and soil will be terminated when 50,000 cubic yards are excavated and placed in the containment cell..." This statement needs clarification. The amount of contaminated sediment and soil needing removal should dictate the termination of the excavation activity, not the capacity of the cell. The Unilateral Order requires the excavation of sediments, based on a set of characterization criteria, from CS-B, CS-C, CS-D and CS-E. Anything less than this will not meet the requirements of the Order. Solutia may need to either strengthen the accuracy of their volume estimates and/or increase the size of the containment cell to account for a possible volume greater than 50,000 yards.

**3. Section 4, Page 4-4, Subsection 4.3.2:** The last sentence of this subsection requires further explanation. Why would an overflow structure be needed to allow rainwater to discharge into CS-B?

**4. Section 4, Page 4-9, Subsection 4.3.5:** The end point for excavation in CS-E is not very clear in this section. The southern end of CS-E is at Route 157. Also, the method for conducting the excavation within the parking lot for Parks College should be explained here. Dead Creek is subterranean at this point. The creek will need to be dug out. Will it be left open after the excavation?

Also, earlier discussions between U.S. EPA and Solutia regarding the sediment removal action included excavating into the northern portions of CS-F - up to the Terminal Railroad crossing

near Cargill Road. The mutual agreement was that the residential areas in Cahokia warranted the sediment removal action. The area from Route 157 to the Terminal Railroad crossing is clearly within the residential area of Cahokia. The extent of this removal action needs to be further clarified.

**5. Section 5, Page 5-1, Subsection 5.0:** Please mention within this text that when the removal within a creek segment is completed the gravel and sand filter traps will be removed and placed into the constructed containment cell.

**6. Section 6, Page 6-1, Subsection 6.0:** The discussion regarding the use of earthen berms to divert storm water away from Site M needs to include a contingency for managing this diverted storm water so that it does not back up into the nearby homes on Walnut Street. It is in everyone's best interest to assure that the removal action does not cause any short-term adverse impact on the local residents. Storm water diversion management should also apply to all other creek segments.

**7. Section 7, Page 7-1, Subsection 7.0:** Please insert a sentence within the first paragraph that reads....."The data results will be provided on-site and to the U.S. EPA as soon as the data has been provide from the laboratory performing the analysis."

**8. Section 7, Page 7-2, Subsection 7.1:** The final sentence of this subsection states: "Samples will be collected from 0 to12 inches below the bottom of the excavated channel, TCLP extracted and the extract will be analyzed for TCL/TAL parameters and dioxins/furans." Please note that TCL/TAL should be analyzed on non-extracted sediment samples.

**9. Section 8, Page 8-1:** As a reminder, Solutia should keep in mind the possibility exists that there may be a need to conduct further sediment/soil removal from Dead Creek during the later remedial action phase. The use of concrete mats during this removal action will possibly make this future work more difficult and expensive.

**10. Section 10:** Duration for the sediment dewatering is incorrect (should be 8 months instead of 12). Also, consideration should be given to transferring the sediments to the cell as soon as construction is substantially complete. If there are final components of the cell construction that would not interfere with placing the sediments into the cell then the transfer activity could possibly start early. Also, the end date for the cap construction has a typo (Oct. 39).

**11. Appendix 5:** Please provide a detail drawing for the dewatering of Site M.

**12. Appendix 6, Plan and Profile Sheet 2:** In light of several comments made by other agencies, would it be possible and/or practical to either widen the opening between Site M and Creek Segment B (CS-B) or permanently eliminate the peninsula which separates Site M from CS-B.

**13. Appendix 6, New Dead Creek Channel Details, Sheet 3:** Under the legend of the Typical Channel Section, there is a line called "clean fill". After excavation is complete, why would you bring clean fill into the creek bed before the articulated concrete mat is placed? Please explain.

**14. Appendix 7, Section 4, Page 4-3, Subsection 4.1.3:** Please add a sentence to the text which states the depth the gas vents will penetrate the waste material.

**15. Appendix 7, Section 4, Page 4-13, Subsection 4.5.3:** Will any type of high water/leachate alarm be installed into the sump area? If not, how will Solutia check the leachate head level to determine when it is time to pump? Please elaborate with in the text.

**16. Appendix 7, Section 5, Page 5-5, Subsection 5.4.4:** Where does the storm water flow after it has traveled down the paved downchute and into the stilling basin? It appears from the drawing Cover System Plan, Sheet C1.5 that nothing is contemplated. I think it is best to direct the surface water away from the containment cell and either into Segment B or a storm sewer as soon as possible. Please indicate within the text and if appropriate alter the drawing Cover System Plan, Sheet C1.5.

**17. Appendix 7, Figure 4-8 and 4-9:** Please add detail drawings for both the primary and secondary riser which shows a cross section of the sump and riser as the riser angles up the slope to the top of the containment cell.

**18. Appendix E:** At the bottom of page 01010-4 the reference to the Pensacola Plant should be changed.